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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,278	01/22/2004	Robert C. Michaels	S005 100101	6482

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FELIX L. FISCHER, ATTORNEY AT LAW  
1607 MISSION DRIVE  
SUITE 204  
SOLVANG, CA 93463

EXAMINER

FLYNN, AMANDA R

ART UNIT	PAPER NUMBER
3743	

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/763,278

Applicant(s)

MICHAELS, ROBERT C.

Examiner

Amanda R. Flynn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### ***Specification***

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification lacks antecedent basis for the subject matter of claim 15.

### ***Claim Objections***

3. Claim 11 is objected to because of the following informalities: In line 2, it appears that "to apertures" should be amended to read: --two apertures--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 4-10 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Number 4,240,420 to Riaboy.

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Riaboy discloses a personal air purifier for attachment to a user's face and nose comprising: a filter medium (14) having a periphery with a shape adapted to circumscribe a continuous perimeter including the philtrum, the face posterior to the left alar groove, the dorsum of the nose and the face posterior to the right alar groove; an adhesive strip (16) affixed to the filter medium around the periphery to sealingly bond the peripheral shape to the perimeter on the face. The air purifier further comprises a release liner (22) removably attached to the adhesive strip distal the filter medium. The adhesive strip (16) comprises adhesive tape attached over a portion of its width to an exterior surface of the filter medium, with a remaining portion of the width extending from the periphery of the filter medium (see Figure 3, at 20). The adhesive strip comprises an adhesive layer bonded to an interior surface of the filter medium proximate the periphery (again, see Figure 3).

The personal air purifier can also be considered as a personal air purifier for a user's face comprising: an adhesive strip (16) having a first periphery with a shape adapted to circumscribe a continuous perimeter including the philtrum, the face posterior to the left alar groove, the dorsum of the nose and the face posterior to the right alar groove; a filter medium (14) affixed to the adhesive strip at a second periphery, said adhesive strip bonding the peripheral shape to the perimeter on the face and sealing the filter medium. The filter medium is further affixed to a first side of the adhesive strip and the adhesive strip bonds to the perimeter on the face on a second side of the adhesive strip. The periphery of the adhesive strip is a first periphery with a shape adapted to circumscribe a continuous perimeter including the philtrum, the face posterior to the left alar groove, the dorsum of the nose and the face posterior to the right alar groove, and the filter medium is affixed to the adhesive strip at a second periphery inset from the first periphery,

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said adhesive strip bonding the first peripheral shape to the perimeter on the face and sealing the filter medium on the second periphery. The adhesive strip is further disclosed to be adhesive tape. The filter medium encompasses a volume around the nose that provides a non-restricted area greater than an area defined by the user's nostrils (see column 2, lines 31-35).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riaboy in view of U.S. Patent Number 6,308,330 to Hollander et al.

Riaboy discloses the previously described air purifier, having a filter medium and an adhesive strip affixed to the periphery of the filter medium. Riaboy does not disclose that the filter medium has a plurality of slits about the periphery.

Hollander et al. discloses a personal air purifier, having a filter medium and an adhesive strip affixed to the periphery of the filter medium. Hollander et al. disclose slits (14, 34) that extend through the mask, about the periphery, to allow the mask to better adhere to the face. Hollander et al. do not specify that the slit have a length less than the width of the adhesive.

It would have been obvious to one skilled in the art at the time the invention was made to have provided the air purifier disclosed by Riaboy with a plurality of slits about the periphery of the mask, as taught by Hollander et al., to allow the mask to better adhere to the face. Further, it would have been obvious to have provided the slits with a length less than the width of the

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adhesive, or any other length, to allow proper functioning of the device, as it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Riaboy in view of U.S. Patent Number 2,572,254 to Folberth.

Riaboy discloses the previously described air purifier, having a filter medium attached to a second periphery of an adhesive strip. Riaboy does not disclose that filter medium comprises two "technical vents" and the second periphery comprises two apertures to retain the vents.

Folberth discloses a personal air purifier having two apertures containing filter medium, wherein each aperture and filter constitutes a "technical vent" to comprise a light weight effective filter.

It would have been obvious to one skilled in the art at the time the invention was made to have provided the personal air purifier disclosed by Riaboy, wherein the filter medium comprises two technical vents secured in two apertures, as taught by Folberth, to provide a light weight filter.

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Riaboy in view of U.S. Patent Number 5,875,775 to Nur et al.

Riaboy discloses the previously described air purifier, having a filter medium attached to an adhesive strip. Riaboy does not specify the material of the filter medium.

Nur et al. disclose a filter medium comprising a woven polymer fabric material, to trap particles above 0.3 microns. Nur et al. specify that filter medium is 99% effective.

It would have been obvious to one skilled in the art at the time the invention was made to have provided the personal air purifier disclosed by Riaboy, wherein the filter medium is a woven polymer fabric material, for its effectiveness at trapping small particles.

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Riaboy in view of U.S. Patent Number 4,510,931 to Henderson et al.

Riaboy discloses the previously described air purifier, having a filter medium attached to an adhesive strip. Riaboy does not specify the material of the filter medium.

Henderson et al. disclose a filter medium comprising a membrane of ePTFE, to allow unhindered breathing through the filter.

It would have been obvious to one skilled in the art at the time the invention was made to have provided the personal air purifier disclosed by Riaboy, wherein the filter medium is a membrane of ePTFE as taught by Henderson et al., to allow unhindered breathing through the filter.

11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Riaboy in view of U.S. Patent Number 5,735,270 to Bayer.

Riaboy discloses the previously described air purifier, having a filter medium attached to an adhesive strip. Riaboy does not specify the material of the filter medium.

Bayer discloses a filter medium comprising non-woven polyester media, to allow sufficient deformation of the media, to conform to the wearer.

It would have been obvious to one skilled in the art at the time the invention was made to have provided the personal air purifier disclosed by Riaboy, wherein the filter medium is non-woven polyester media, to allow sufficient deformation of the filter.

12. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Riaboy in view of U.S. Patent Number 6,409,806 to Jones et al.

Riaboy discloses the previously described air purifier, having a filter medium attached to an adhesive strip. Riaboy does not specify that the filter medium be a dielectric material that attracts micron-sized particles.

Jones et al. disclose a filter made of a filter medium comprising a dielectric material, to attract micron-sized particles. Jones et al. specify that the dielectric material enhance particle capture in mask filters.

It would have been obvious to one skilled in the art at the time the invention was made to have provided the personal air purifier disclosed by Riaboy, wherein the filter medium is a dielectric material, as taught by Jones et al., to enhance particle capture in the air purifier.

13. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Riaboy in view of U.S. Patent Number 4,984,302 to Lincoln.

Riaboy discloses the previously described air purifier, having a filter medium attached to an adhesive strip. Riaboy does not specify that the purifier comprise a notch centrally located at the top of the periphery.

Lincoln discloses a personal air purifier, having a filter medium attached to an adhesive strip. A notch is provided at the center of the top periphery of the purifier to allow the device to substantially conform to a wearer's nose.

It would have been obvious to one skilled in the art at the time the invention was made to have provided the personal air purifier disclosed by Riaboy, wherein the purifier has a notch at



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the center top periphery, as taught by Lincoln, to allow the device to substantially conform to a wearer.


**Conclusion**

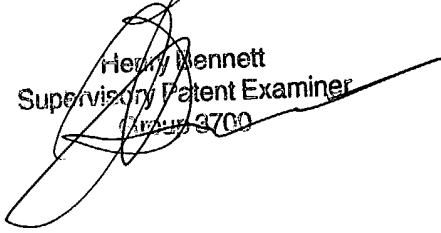
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda R. Flynn whose telephone number is 703-306-4056. The examiner can normally be reached on Monday-Thursday, 8:30 - 6:00 and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry A. Bennett can be reached on 703-308-0101. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Amanda R. Flynn  
Examiner  
Art Unit 3743

  
Henry A. Bennett  
Supervisory Patent Examiner  
Art Unit 3700